<table>
<thead>
<tr>
<th></th>
<th>Table of Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>New Products</td>
</tr>
<tr>
<td>4</td>
<td>DC LED Engine Retrofit Kits</td>
</tr>
<tr>
<td>6</td>
<td>DirectAC LED Retrofit Kits</td>
</tr>
<tr>
<td>8</td>
<td>Canopy LED Retrofit Kit</td>
</tr>
<tr>
<td>9</td>
<td>Highbay LED Retrofit Kit</td>
</tr>
<tr>
<td>10</td>
<td>HotSpot1 LED Emergency Retrofit Kits</td>
</tr>
<tr>
<td>11</td>
<td>HotSpot Constant Power LED Emergency Drivers</td>
</tr>
<tr>
<td>Back Cover</td>
<td>Contact Us</td>
</tr>
</tbody>
</table>
High-Efficiency DC LED Retrofit Kits

The next generation of Fulham’s innovative DC LED engines provide increased efficacy for lower energy use and cost savings. Round and rectangular form factors with universal voltage and 0-10V dimming standard.

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Input Watts</th>
<th>Input Voltage (VAC)</th>
<th>Lumens @4000K</th>
<th>Efficacy</th>
<th>Dimming Type</th>
<th>Dimensions (Inches)</th>
<th>Max Case Temp (Tc) Module / Driver</th>
</tr>
</thead>
<tbody>
<tr>
<td>VKMUNV008RT840A</td>
<td>8</td>
<td>UNV</td>
<td>1400</td>
<td>151</td>
<td>0-10V</td>
<td>7.4&quot;L x 4.7&quot;W x 0.92&quot;H</td>
<td>105°C/90°C</td>
</tr>
<tr>
<td>VKMUNV018RT840A</td>
<td>17</td>
<td>UNV</td>
<td>2675</td>
<td>142</td>
<td>0-10V</td>
<td>7.4&quot;L x 4.7&quot;W x 1.18&quot;H</td>
<td>105°C/90°C</td>
</tr>
<tr>
<td>VKMUNV008RD840A</td>
<td>8</td>
<td>UNV</td>
<td>1400</td>
<td>151</td>
<td>0-10V</td>
<td>7.83&quot; dia x 0.92&quot;H</td>
<td>105°C/90°C</td>
</tr>
<tr>
<td>VKMUNV012RD840A</td>
<td>12</td>
<td>UNV</td>
<td>2115</td>
<td>152</td>
<td>0-10V</td>
<td>7.83&quot; dia x 0.92&quot;H</td>
<td>105°C/90°C</td>
</tr>
<tr>
<td>VKMUNV018RD840A</td>
<td>17</td>
<td>UNV</td>
<td>2675</td>
<td>142</td>
<td>0-10V</td>
<td>7.83&quot; dia x 1.18&quot;H</td>
<td>105°C/90°C</td>
</tr>
<tr>
<td>VKMUNV025RD840A</td>
<td>25</td>
<td>UNV</td>
<td>4015</td>
<td>145</td>
<td>0-10V</td>
<td>7.83&quot; dia x 1.18&quot;H</td>
<td>105°C/90°C</td>
</tr>
</tbody>
</table>

Linear HO Kits

High output, easy-to-mount linear modules paired with efficient, high power drivers. Designed for use in highbays, vapor tights, and troffers, these cULus Classified kits are ideal for T5HO retrofit projects.

- Multiple power levels, including programmable driver option
- 22” and 44” module length options
- Universal voltage (120V-277V), 0-10V dimming standard
- Aluminum extrusion heatsink with preinstalled magnets
- Includes wiring harness for installing multiple lamps

DirectAC Linear Engines

Low-profile, universal voltage retrofit kits featuring DirectAC Drive on integrated LED boards. New linear form factor allows retrofit of a wide range of luminaires. TRIAC / ELV dimmable.

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Input Power</th>
<th>Max Lumens @4000K/80CRI</th>
<th>Length</th>
<th>Plate Shape</th>
</tr>
</thead>
<tbody>
<tr>
<td>TJTUNV010AL840B</td>
<td>10W</td>
<td>1065</td>
<td>5.5&quot;</td>
<td>Linear</td>
</tr>
<tr>
<td>TJTUNV015AL840B</td>
<td>15W</td>
<td>1680</td>
<td>11&quot;</td>
<td></td>
</tr>
<tr>
<td>TJTUNV030AL840B</td>
<td>30W</td>
<td>3360</td>
<td>22&quot;</td>
<td></td>
</tr>
</tbody>
</table>

HotSpot EZ Exit

The innovative alternative to traditional emergency lights. Linear LED strips mount seamlessly in standard T-grid ceilings, with constant power emergency drivers mounted out of sight on top of the grid. During power outages the system provides at least 90 minutes of reliable, hassle-free emergency lighting.
DC LED Engine Retrofit Kits

The simple, field-installable solution for converting existing luminaires to LED

Retrofitting existing luminaires to efficient LED technology has never been easier. Fulham Vizion Retrofit Kits are available in round, half-round, and rectangular configurations to fit most standard fixtures. As cULus Classified Kits, they are suited for either field installation or factory retrofits. 0-10V and TRIAC / ELV dimmable models, as well as a wide range of color temperature options, are available.
- Highly efficient LED technology reduces energy costs
- Protect your investment by preserving existing luminaires
- No bulbs to change means lower maintenance costs
- Simple installation can be done in the field in minutes
- ENERGY STAR® Luminaire 2.0 Listed (for rebate programs)
- Kits include LED Engine installation hardware, required UL Classified labels, and installation instructions

### Specifications

<table>
<thead>
<tr>
<th>Beam Angle</th>
<th>120°</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRI</td>
<td>80 Standard, 90 Available</td>
</tr>
<tr>
<td>Operating Ambient Temp. Range (Ta)</td>
<td>-35°C to + 45°C (-31°F to + 113°F)</td>
</tr>
<tr>
<td>Estimated Lumen Maintenance (L70)</td>
<td>&gt;60,000 hours at Max Tc</td>
</tr>
<tr>
<td>Color Consistency</td>
<td>Binning per ANSI C78.377-2008; 7 SDCM</td>
</tr>
<tr>
<td>Safety/Compliance</td>
<td>Class 2 Lighting System; cULus File # E365124 (UL 1598C); ENERGY STAR; RoHS Compliant; FCC Part 15B</td>
</tr>
<tr>
<td>Warranty</td>
<td>5 years @ Max Tc from the date of manufacture</td>
</tr>
</tbody>
</table>

### Round Models

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Input Watts</th>
<th>Input Voltage (VAC)</th>
<th>Lumens @4000K</th>
<th>Dimming Type</th>
<th>Dimensions (Inches)</th>
<th>Max Case Temp (Tc)</th>
<th>Module / Driver</th>
<th>ENERGY STAR Listed*</th>
<th>ENERGY STAR CSD*</th>
</tr>
</thead>
<tbody>
<tr>
<td>TKMUNV011RDxxx1</td>
<td>11 UNV</td>
<td>1155</td>
<td>0-10V</td>
<td>7 dia. x 0.95 H</td>
<td>90°C / 90°C</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TKT120013RDxxx1</td>
<td>13 120</td>
<td>1445</td>
<td>TRIAC/ELV</td>
<td>7 dia. x 0.95 H</td>
<td>90°C / 90°C</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TKMUNV013RDxxx1</td>
<td>13 UNV</td>
<td>1445</td>
<td>0-10V</td>
<td>7 dia. x 0.95 H</td>
<td>90°C / 90°C</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TKT120021RDxxx1</td>
<td>21 120</td>
<td>2305</td>
<td>TRIAC/ELV</td>
<td>9 dia. x 1.2 H</td>
<td>90°C / 80°C</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TKMUNV021RDxxx1</td>
<td>21 UNV</td>
<td>2305</td>
<td>0-10V</td>
<td>9 dia. x 1.2 H</td>
<td>90°C / 86°C</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TKT120025RDxxx1</td>
<td>25 120</td>
<td>2880</td>
<td>TRIAC/ELV</td>
<td>9 dia. x 1.2 H</td>
<td>90°C / 80°C</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TKMUNV025RDxxx1</td>
<td>25 UNV</td>
<td>2880</td>
<td>0-10V</td>
<td>9 dia. x 1.2 H</td>
<td>90°C / 86°C</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TKMUNV032RDxxx1</td>
<td>32 UNV</td>
<td>3200</td>
<td>0-10V</td>
<td>9 dia. x 1.2 H</td>
<td>90°C / 90°C</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TKMUNV032RDxxx1</td>
<td>32 UNV</td>
<td>3200</td>
<td>Non-dimming</td>
<td>9 dia. x 1.2 H</td>
<td>90°C / 90°C</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TKMUNV039RDxxx1</td>
<td>39 UNV</td>
<td>4000</td>
<td>0-10V</td>
<td>9 dia. x 1.2 H</td>
<td>90°C / 90°C</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TKMUNV039RDxxx1</td>
<td>39 UNV</td>
<td>4000</td>
<td>Non-dimming</td>
<td>9 dia. x 1.2 H</td>
<td>90°C / 90°C</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Half-Round Models

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Input Watts</th>
<th>Input Voltage (VAC)</th>
<th>Lumens @4000K</th>
<th>Dimming Type</th>
<th>Dimensions (Inches)</th>
<th>Max Case Temp (Tc)</th>
<th>Module / Driver</th>
<th>ENERGY STAR Listed*</th>
<th>ENERGY STAR CSD*</th>
</tr>
</thead>
<tbody>
<tr>
<td>TKMUNV011HRxxx1</td>
<td>11 UNV</td>
<td>1155</td>
<td>0-10V</td>
<td>7 dia. x 1.22 H</td>
<td>90°C / 90°C</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TKT120013HRxxx1</td>
<td>13 120</td>
<td>1445</td>
<td>TRIAC/ELV</td>
<td>7 dia. x 1.22 H</td>
<td>90°C / 88°C</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TKMUNV013HRxxx1</td>
<td>13 UNV</td>
<td>1445</td>
<td>0-10V</td>
<td>7 dia. x 1.22 H</td>
<td>90°C / 90°C</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Rectangular Models

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Input Watts</th>
<th>Input Voltage (VAC)</th>
<th>Lumens @4000K</th>
<th>Dimming Type</th>
<th>Dimensions (Inches)</th>
<th>Max Case Temp (Tc)</th>
<th>Module / Driver</th>
<th>ENERGY STAR Listed*</th>
<th>ENERGY STAR CSD*</th>
</tr>
</thead>
<tbody>
<tr>
<td>TKMUNV011RTxxx6</td>
<td>11 UNV</td>
<td>1155</td>
<td>0-10V</td>
<td>7 L x 4 W x 1.22 H</td>
<td>90°C / 90°C</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TKT120013RTxxx6</td>
<td>13 120</td>
<td>1445</td>
<td>TRIAC/ELV</td>
<td>7 L x 4 W x 1.22 H</td>
<td>90°C / 88°C</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TKMUNV013RTxxx6</td>
<td>13 UNV</td>
<td>1445</td>
<td>0-10V</td>
<td>7 L x 4 W x 1.22 H</td>
<td>90°C / 90°C</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* ENERGY STAR designations: Listed = Luminaire 2.0. CSD= Certified Subcomponent Database
DirectAC LED Retrofit Kit Engines provide a cost-efficient, reliable solution for wall sconces and ceiling luminaires. These innovative engines eliminate the need for an LED driver, creating a lower profile and simplifying installation. They are available in various power levels from 10-34W, with standard TRIAC/ELV dimming, a range of color temperatures, and CRI up to 90. These cURus and cULus Classified kits include installation hardware and labels, and are suitable for open or fully enclosed luminaires.
- Universal voltage input
- Very low flicker, meets Title 24 requirements
- AC Direct Drive on integrated LED board
- Smooth TRIAC/ELV dimming down to 10%
- High voltage barrier and 5VA rated lens
- Lower energy costs, longer lifespan than fluorescent
- Standard mounting holes for easy installation
- UL Classified, ENERGY STAR Luminaire 2.0
- Retrofit hardware and labels included
- Suitable for glass or plastic diffusers, open or closed luminaires

## Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input Voltage</td>
<td>UNV (120-277VAC)</td>
</tr>
<tr>
<td>Angle</td>
<td>120°</td>
</tr>
<tr>
<td>Flicker Percentage</td>
<td>&lt;30%</td>
</tr>
<tr>
<td>CRI</td>
<td>80 standard, 90 available</td>
</tr>
<tr>
<td>Operating Ambient Temp. Range (Ta)</td>
<td>-35°C to +50°C</td>
</tr>
<tr>
<td>Estimated Lumen Maintenance (L70) / Color Consistency</td>
<td>50,000 hours / 3 SDCM</td>
</tr>
<tr>
<td>PCB Material</td>
<td>MCPCB (for superior thermal management)</td>
</tr>
<tr>
<td>Lens Material</td>
<td>Optical Grade Polycarbonate (5VA Flame rated)</td>
</tr>
<tr>
<td>Safety/Compliance</td>
<td>RoHS, cURus, ENERGY STAR Luminaire 2.0 Listed</td>
</tr>
<tr>
<td>Protections</td>
<td>Surge 2.5kV; Over temperature control</td>
</tr>
<tr>
<td>Available Color Temperatures</td>
<td>Standard options: 3000K, 3500K, 4000K. Also available: 2700K, 5000K</td>
</tr>
<tr>
<td>Warranty</td>
<td>5 Years @ Max 2700K from the date of manufacture</td>
</tr>
</tbody>
</table>

## Universal Voltage DirectAC Retrofit Kits

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Input Power</th>
<th>Max Lumens @4000K/80CRI</th>
<th>Dimensions</th>
<th>Plate Shape</th>
<th>ENERGY STAR Listed*</th>
<th>ENERGY STAR CSD*</th>
</tr>
</thead>
<tbody>
<tr>
<td>TJTUNV010ACxxxB</td>
<td>10W</td>
<td>1065</td>
<td>3.11” Dia. x 0.71” H</td>
<td>Circular</td>
<td><img src="image" alt="Energy Star Listed" /></td>
<td><img src="image" alt="Energy Star CSD" /></td>
</tr>
<tr>
<td>TJTUNV015ACxxxB</td>
<td>15W</td>
<td>1680</td>
<td>5.08” Dia. x 0.69” H</td>
<td>Circular</td>
<td><img src="image" alt="Energy Star Listed" /></td>
<td><img src="image" alt="Energy Star CSD" /></td>
</tr>
<tr>
<td>TJTUNV015ARxxxB</td>
<td>15W</td>
<td>1725</td>
<td>7.4” L x 4” W x 0.81” H</td>
<td>Rectangular</td>
<td><img src="image" alt="Energy Star Listed" /></td>
<td><img src="image" alt="Energy Star CSD" /></td>
</tr>
<tr>
<td>TJTUNV023ACxxxB</td>
<td>23W</td>
<td>2540</td>
<td>6.97” Dia. x 0.81” H</td>
<td>Circular</td>
<td><img src="image" alt="Energy Star Listed" /></td>
<td><img src="image" alt="Energy Star CSD" /></td>
</tr>
<tr>
<td>TJTUNV034ACxxxB</td>
<td>34W</td>
<td>3685</td>
<td>9.55” Dia. x 0.81” H</td>
<td>Circular</td>
<td><img src="image" alt="Energy Star Listed" /></td>
<td><img src="image" alt="Energy Star CSD" /></td>
</tr>
</tbody>
</table>

* ENERGY STAR designations: Listed = Luminaire 2.0.  CSD= Certified Subcomponent Database

- **Configuration**
  - 8 = Standard 80 CRI
  - 9 = 90 CRI

- **Color Temperature**
  - Custom:
    - 27 = 2700K
    - 50 = 5000K
  - Standard:
    - 30 = 3000K
    - 35 = 3500K
    - 40 = 4000K
Canopy LED Retrofit Kit

An efficient, field-installable LED replacement for HID and CFL canopy luminaires

Fulham’s new Canopy LED Retrofit Kit is a complete, field-installable solution for canopies, parking garages, and similar applications. It offers universal voltage input, 0-10V dimming, high power factor, and low THD, making it an ideal replacement for HID systems up to 250W. Listed on the DLC® Qualified Products List to facilitate energy rebates, the kit can be installed in less than 10 minutes. An integrated programmable driver provides multiple lumen output options and enhanced thermal management.

- Listed on DLC® Qualified Products List for energy rebates
- Advanced optics for even light distribution
- Compatible with daylight harvesting controls, occupancy sensors, and building automation systems for enhanced energy savings
- Integrated thermal management via NTC resistors

Specifications

<table>
<thead>
<tr>
<th>Input Voltage</th>
<th>120-277VAC; 50/60 Hz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input Current</td>
<td>0.54A (Max.)</td>
</tr>
<tr>
<td>Input Power</td>
<td>65W</td>
</tr>
<tr>
<td>Input Power Factor</td>
<td>&gt; 0.97</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Operating Ambient Temp. Range (Ta)</th>
<th>-20 to +45°C / -4 to +113°F</th>
</tr>
</thead>
</table>

| Estimated Lumen Maintenance       | L70 = >51,000hrs @ 100°C/ L90 = >51,000hrs @ 100°C (TM-21 Reported) |

| Color Consistency                 | Binning per ANSI C78.377-2015 @ 85°C; 5 SDCM |

Safety/Compliance

- Driver: cURus (E342838: T1M1UNV105P-60F; T1A1UNV105P-60F)
- Module: cURus (E351548: TMU150085ECXYYA)
- Retrofit Kit: cULus (E365124: TRxUNV065ECXXXA)
- DLC 4.2: Outdoor Canopy Retrofit (I.D: PUVVMB00 for 4K/1050mA and I.D: PQ5O93CU for 5K/1050mA)
- LED Class 2 Lighting System; Dry or Damp Locations
- Driver Surge Protection: L-N 2kV, L&N-G 4kV; RoHS compliant

Warranty

5 years

Universal Voltage Canopy LED Retrofit Kit

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Dimming Type*</th>
<th>Driver Output Current Setting (mA)</th>
<th>Nominal Lumens @4000K/80CRI (lm)</th>
<th>Efficacy (lm/W)</th>
<th>Available CCT</th>
<th>Dimensions (Dia. x H)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRMUNV065EC8xxA</td>
<td>0-10V Dimming; 100%-0%</td>
<td>1050 (Default)</td>
<td>8700</td>
<td>134</td>
<td>4000K</td>
<td>10” x 1.26”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>850</td>
<td>7165</td>
<td>138</td>
<td>5000K</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>650</td>
<td>5570</td>
<td>142</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>450</td>
<td>3925</td>
<td>145</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>250</td>
<td>2210</td>
<td>142</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* DALI option also available, made to order
Fulham’s Highbay LED Retrofit System is an energy-efficient, field-installable replacement for HID highbay applications. Available for use as a retrofit kit or standalone luminaire, it is composed of a WorkHorse LED programmable driver, Vizion constant current round module, lens, mounting collar, heat sink, and driver housing. The system fits common 822/825 and S22 acrylic refractors and is compatible with daylight harvesting controls, occupancy sensors, and building automation for even greater energy savings.

- Fully assembled LED retrofit system providing up to 25,466 lumens
- Listed on DLC® Qualified Products List for energy rebates
- cULus Classified for 10-minute field installation
- cULus Listed for use as standalone luminaire (no original components required)
- Module features surface mounted device (SMD) LEDs and integrated thermal feedback for higher efficiency and reliability
- Programmable driver allows replacement of common 100, 175, 250, and 400W HID systems
- L70 Calculated, per TM-21, at 100,000 hours (Tc=100°C)

### Specifications

| Beam Angle | 120° |
| Power Factor | > 0.9 |
| Operating Ambient Temp. Range (Ta) | -25 to +45°C / -13 to +113°F |
| Estimated Lumen Maintenance (L70) | L70 > 60,000hrs / L90 > 38,000hrs (TM-21 Reported) |
| L70 > 100,000hrs / L90 > 20,000hrs (TM-21 Calculated) |
| Color Consistency | Binning per ANSI C78.377-2011; 4 SDCM |
| Safety/Compliance | cULus Classified (E365124) |
| DLC 4.0 High Bay Retrofit category: Indoor High-Bay* |
| Non-Class 2 Lighting System |
| IP20: Dry and Damp Locations; Surge Protection: 4KV/6KV; RoHS compliant |
| Warranty | 5 years |

* Standard model (TRMUNV220AC850A) is DLC QPL Listed. Other CCT and CRI options are not listed. Visit [https://www.designlights.org/search/](https://www.designlights.org/search/) for more details.

### Universal Voltage Highbay LED Retrofit Kit

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Input Voltage (VAC)</th>
<th>Input Current (A)</th>
<th>Nominal Input Power (W)</th>
<th>Nominal Lumens @ 5000K/80CRI (lm)</th>
<th>Dimming Type</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRMUNV220ACxxxA</td>
<td>120-277; 50/60 Hz</td>
<td>1.79 @ 120VAC</td>
<td>214</td>
<td>25,466</td>
<td>0-10V</td>
<td>11.5” dia. x 12.4” H</td>
</tr>
</tbody>
</table>
Fulham’s HotSpot1 kits provide easy-to-install emergency LED lighting for common troffer installations, including Type A, B, and C LED tube retrofits. They are UL Classified for field or factory installation, with a range of battery and module options to fit any situation. Each kit includes a HotSpot1 emergency LED driver, battery pack, LED module, required hardware, the necessary UL Classified label, and complete installation instructions.

- Quick plug-n-play room-side installation
- High efficiency, high lumen output LEDs
- Range of module and battery configurations to fit most luminaires

### Specifications

**Input Voltage** 120V-277V (UNV)  
**Input Power** <4W  
**Battery Type** NiCd 3.6VDC  
**Surge Protection** C62.41 (TVS)  
**Output Voltage** 3.6V  
**Illumination Time** Minimum 90 min.  
**Over Current Protection** Fuse  
**Output Short Circuit Protection** Self Resetting PTC  
**Output Classification** UL 1310 / Class 2  
**Input Current** 0.07A  
**Recharge Time Required** 24 hours  
**Ambient Temperature** 0°C - 50°C

### HotSpot1 LED Retrofit Kits

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Watts</th>
<th>Lumen Output</th>
<th>Comparable Lumen Output</th>
<th>Estimated Run Time (Mins)</th>
<th>Module Dimensions (LxW)</th>
<th>Case Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FHSKITT03LNC</strong></td>
<td>3</td>
<td>450</td>
<td>720</td>
<td>145</td>
<td>4.68&quot; x 0.82&quot;</td>
<td>10</td>
</tr>
<tr>
<td><strong>FHSKITT03LND</strong></td>
<td>3</td>
<td>450</td>
<td>720</td>
<td>200</td>
<td>4.68&quot; x 0.82&quot;</td>
<td>10</td>
</tr>
<tr>
<td><strong>FHSKITT03LNF</strong></td>
<td>3</td>
<td>450</td>
<td>720</td>
<td>360</td>
<td>4.68&quot; x 0.82&quot;</td>
<td>20</td>
</tr>
<tr>
<td><strong>FHSKITT03NFL</strong></td>
<td>3</td>
<td>450</td>
<td>720</td>
<td>360</td>
<td>4.68&quot; x 0.82&quot;</td>
<td>20</td>
</tr>
<tr>
<td><strong>FHSKITT04LNC</strong></td>
<td>4</td>
<td>500</td>
<td>800</td>
<td>145</td>
<td>4.68&quot; x 0.82&quot;</td>
<td>10</td>
</tr>
<tr>
<td><strong>FHSKITT04LND</strong></td>
<td>4</td>
<td>500</td>
<td>800</td>
<td>200</td>
<td>4.68&quot; x 0.82&quot;</td>
<td>10</td>
</tr>
<tr>
<td><strong>FHSKITT04LNF</strong></td>
<td>4</td>
<td>500</td>
<td>800</td>
<td>360</td>
<td>4.68&quot; x 0.82&quot;</td>
<td>20</td>
</tr>
<tr>
<td><strong>Linked Linear (2 Modules)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>FHSKITT07LND</strong></td>
<td>7</td>
<td>900</td>
<td>1440</td>
<td>100</td>
<td>4.68&quot; x 0.82&quot;</td>
<td>10</td>
</tr>
<tr>
<td><strong>FHSKITT07LNF</strong></td>
<td>7</td>
<td>900</td>
<td>1440</td>
<td>180</td>
<td>4.68&quot; x 0.82&quot;</td>
<td>20</td>
</tr>
<tr>
<td><strong>FHSKITT07NFL</strong></td>
<td>7</td>
<td>900</td>
<td>1440</td>
<td>180</td>
<td>4.68&quot; x 0.82&quot;</td>
<td>20</td>
</tr>
<tr>
<td><strong>Linked Linear (3 Modules)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>FHSKITT10LNF</strong></td>
<td>10</td>
<td>1350</td>
<td>2160</td>
<td>120</td>
<td>4.68&quot; x 0.82&quot;</td>
<td>20</td>
</tr>
<tr>
<td><strong>FHSKITT10LNFL</strong></td>
<td>10</td>
<td>1350</td>
<td>2160</td>
<td>120</td>
<td>4.68&quot; x 0.82&quot;</td>
<td>20</td>
</tr>
<tr>
<td><strong>Small-H Module</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>FHSKITT06SHC</strong></td>
<td>6</td>
<td>750</td>
<td>1200</td>
<td>90</td>
<td>3.54&quot; x 3.93&quot;</td>
<td>10</td>
</tr>
<tr>
<td><strong>FHSKITT06SHD</strong></td>
<td>6</td>
<td>750</td>
<td>1200</td>
<td>125</td>
<td>3.54&quot; x 3.93&quot;</td>
<td>10</td>
</tr>
<tr>
<td><strong>FHSKITT06SHF</strong></td>
<td>6</td>
<td>750</td>
<td>1200</td>
<td>235</td>
<td>3.54&quot; x 3.93&quot;</td>
<td>20</td>
</tr>
<tr>
<td><strong>FHSKITT10SHF</strong></td>
<td>10</td>
<td>1250</td>
<td>2000</td>
<td>135</td>
<td>3.54&quot; x 3.93&quot;</td>
<td>20</td>
</tr>
<tr>
<td><strong>Large-H Module</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>FHSKITT08LHD</strong></td>
<td>8</td>
<td>1000</td>
<td>1600</td>
<td>90</td>
<td>5.71&quot; x 3.93&quot;</td>
<td>10</td>
</tr>
<tr>
<td><strong>FHSKITT08LHF</strong></td>
<td>8</td>
<td>1000</td>
<td>1600</td>
<td>175</td>
<td>5.71&quot; x 3.93&quot;</td>
<td>20</td>
</tr>
<tr>
<td><strong>FHSKITT10LHF</strong></td>
<td>10</td>
<td>1250</td>
<td>2000</td>
<td>135</td>
<td>5.71&quot; x 3.93&quot;</td>
<td>20</td>
</tr>
</tbody>
</table>

* Linear battery
HotSpot Constant Power
LED Emergency Drivers

Field-installable, constant power output for LED luminaires

The HotSpot Constant Power LED Emergency Driver adds field-installable emergency capability to existing LED luminaires, including Type C LED tube retrofits. During a power outage, the emergency driver automatically engages, providing a constant source of power to the luminaire's LED modules for at least 90 minutes of reliable emergency illumination. The cULus Classified driver is designed for flexibility, with multiple mounting options, a conduit feed, and an LED illuminated test switch, so it can be easily installed in almost any situation while meeting local emergency lighting requirements.

- Field-installable LED emergency backup
- Constant power design for reliable lumen output
- UNV 120-277V, 50/60HZ input
- Multiple power levels available (5W-17W)

Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input Voltage</td>
<td>120-277V (UNV)</td>
</tr>
<tr>
<td>Output Voltage</td>
<td>20-50VDC</td>
</tr>
<tr>
<td>Surge Protection</td>
<td>Per C62.41 (TVS)</td>
</tr>
<tr>
<td>Recharge Time</td>
<td>24 hours</td>
</tr>
<tr>
<td>Ambient Temperature</td>
<td>0ºC - 50ºC</td>
</tr>
<tr>
<td>Output Type</td>
<td>Class 2</td>
</tr>
<tr>
<td>RFI/EMI</td>
<td>FCC Part 15A Non-Consumer</td>
</tr>
<tr>
<td>Illumination Time</td>
<td>Minimum 90 minutes</td>
</tr>
</tbody>
</table>

HotSpot Constant Power Drivers

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Output Power (W)</th>
<th>Output Lumens*</th>
<th>Output Current (mA)</th>
<th>Dimensions (L x W x H)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FHSCP-UNV-5WL</td>
<td>5</td>
<td>800</td>
<td>100-250</td>
<td>11.5&quot; x 2.6&quot; x 1.5&quot;</td>
</tr>
<tr>
<td>FHSCP-UNV-7.8WL</td>
<td>7.8</td>
<td>1250</td>
<td>156-390</td>
<td>15.4&quot; x 2.6&quot; x 1.5&quot;</td>
</tr>
<tr>
<td>FHSCP-UNV-10.7WL</td>
<td>10.7</td>
<td>1700</td>
<td>214-535</td>
<td>15.4&quot; x 2.6&quot; x 1.5&quot;</td>
</tr>
<tr>
<td>FHSCP-UNV-13.7WL</td>
<td>13.7</td>
<td>2200</td>
<td>274-685</td>
<td>19.2&quot; x 2.6&quot; x 1.5&quot;</td>
</tr>
<tr>
<td>FHSCP-UNV-17WL</td>
<td>17</td>
<td>2700</td>
<td>340-850</td>
<td>19.2&quot; x 2.6&quot; x 1.5&quot;</td>
</tr>
</tbody>
</table>

* Based on 160 lumens/watt light source
Contact US

Visit www.fulham.com for product information, sales representative contact info, technical documentation, and more.

Fulham Headquarters
(North America)
12705 S. Van Ness Avenue
Hawthorne, CA 90250
Tel: +1 323.599.5000
Fax: +1 323.754.9060
order@fulham.com
www.fulham.com

Fulham Client Services
Order processing, technical support, product information, requests for quotations
Tel: +1 323.599.5000
Fax: +1 323.794.9060
order@fulham.com

Fulham Warranty Department
Tel: +1 323.599.5001
warranty@fulham.com

Global Locations & Contacts

Fulham Company B.V. (Europe)
Amperestraat 1
1704 SM Heerhugowaard
Netherlands
Tel: +31 72 572 3000
sales.eu@fulham.com

Fulham Company Ltd. (Hong Kong)
Unit 6, 6/F Kowloon Plaza
485 Castle Peak Road
Cheung Sha Wan, Kowloon
Hong Kong
Tel: +852.2314.4801
Fax: +852.2314.4186
hongkongsales@fulham.com

Fulham Electronic Co. Ltd.
(South China)
Room 604, Vanke Tower, Hongqi Road,
Nancheng District, Dongguan City,
Guangdong Province, P.R. China
Post Code: 523000
Tel: +86.769.2199.2606
Fax: +86.769.2199.2605
southchinasales@fulham.com

Fulham Electronic Co. Ltd.
(Central, East & North China)
Room 302, Xing Yuan Technology Plaza
No 418, Gui Ping Road
Cache-Jing Hi-Tech Park
Shanghai, P.R. China
Post Code: 200233
Tel: +86.21.6495.2777
Fax: +86.21.6426.5271
centralchinasales@fulham.com

Fulham Company Ltd.
(Middle East & Africa)
PowerLED FZCO
(Fulham Authorized Agent)
Business Centre World,
Jafza One, 11th Floor
PO Box 35608, Jebel Ali Free Zone
Dubai, United Arab Emirates
Tel: +971 4 817 0378
Fax: +971 4 817 0201
fulhamdubai@fulham.com

Fulham (India) Pvt. Ltd.
343, Kaliandas Udyog Bhavan
Sadanand Tandel Marg
Near Century Bazar
Prabhadevi, Mumbai 400025
India
Tel: +91.22.66388775-9
gmalkani@fulham.com
sghose@fulham.com

Fulham (India) Pvt. Ltd.
Survey No. 26-3
Village Narhe
Taluka Haveli, Pune 411041
India
Tel: +91.20.24690703/4
Fax: +91.20.24690712
gmalkani@fulham.com
sghose@fulham.com

Fulham Headquarters
(North America)
12705 S. Van Ness Avenue
Hawthorne, CA 90250
Tel: +1 323.599.5000
Fax: +1 323.754.9060
order@fulham.com
www.fulham.com

Fulham Client Services
Order processing, technical support, product information, requests for quotations
Tel: +1 323.599.5000
Fax: +1 323.794.9060
order@fulham.com

Fulham Warranty Department
Tel: +1 323.599.5001
warranty@fulham.com

Global Locations & Contacts

Fulham Company B.V. (Europe)
Amperestraat 1
1704 SM Heerhugowaard
Netherlands
Tel: +31 72 572 3000
sales.eu@fulham.com

Fulham Company Ltd. (Hong Kong)
Unit 6, 6/F Kowloon Plaza
485 Castle Peak Road
Cheung Sha Wan, Kowloon
Hong Kong
Tel: +852.2314.4801
Fax: +852.2314.4186
hongkongsales@fulham.com

Fulham Electronic Co. Ltd.
(South China)
Room 604, Vanke Tower, Hongqi Road,
Nancheng District, Dongguan City,
Guangdong Province, P.R. China
Post Code: 523000
Tel: +86.769.2199.2606
Fax: +86.769.2199.2605
southchinasales@fulham.com

Fulham Electronic Co. Ltd.
(Central, East & North China)
Room 302, Xing Yuan Technology Plaza
No 418, Gui Ping Road
Cache-Jing Hi-Tech Park
Shanghai, P.R. China
Post Code: 200233
Tel: +86.21.6495.2777
Fax: +86.21.6426.5271
centralchinasales@fulham.com

Fulham Company Ltd.
(Middle East & Africa)
PowerLED FZCO
(Fulham Authorized Agent)
Business Centre World,
Jafza One, 11th Floor
PO Box 35608, Jebel Ali Free Zone
Dubai, United Arab Emirates
Tel: +971 4 817 0378
Fax: +971 4 817 0201
fulhamdubai@fulham.com

Fulham (India) Pvt. Ltd.
343, Kaliandas Udyog Bhavan
Sadanand Tandel Marg
Near Century Bazar
Prabhadevi, Mumbai 400025
India
Tel: +91.22.66388775-9
gmalkani@fulham.com
sghose@fulham.com

Fulham (India) Pvt. Ltd.
Survey No. 26-3
Village Narhe
Taluka Haveli, Pune 411041
India
Tel: +91.20.24690703/4
Fax: +91.20.24690712
gmalkani@fulham.com
sghose@fulham.com

Fulham Headquarters
(North America)
12705 S. Van Ness Avenue
Hawthorne, CA 90250
Tel: +1 323.599.5000
Fax: +1 323.754.9060
order@fulham.com
www.fulham.com

Fulham Client Services
Order processing, technical support, product information, requests for quotations
Tel: +1 323.599.5000
Fax: +1 323.794.9060
order@fulham.com

Fulham Warranty Department
Tel: +1 323.599.5001
warranty@fulham.com

Global Locations & Contacts

Fulham Company B.V. (Europe)
Amperestraat 1
1704 SM Heerhugowaard
Netherlands
Tel: +31 72 572 3000
sales.eu@fulham.com

Fulham Company Ltd. (Hong Kong)
Unit 6, 6/F Kowloon Plaza
485 Castle Peak Road
Cheung Sha Wan, Kowloon
Hong Kong
Tel: +852.2314.4801
Fax: +852.2314.4186
hongkongsales@fulham.com

Fulham Electronic Co. Ltd.
(South China)
Room 604, Vanke Tower, Hongqi Road,
Nancheng District, Dongguan City,
Guangdong Province, P.R. China
Post Code: 523000
Tel: +86.769.2199.2606
Fax: +86.769.2199.2605
southchinasales@fulham.com

Fulham Electronic Co. Ltd.
(Central, East & North China)
Room 302, Xing Yuan Technology Plaza
No 418, Gui Ping Road
Cache-Jing Hi-Tech Park
Shanghai, P.R. China
Post Code: 200233
Tel: +86.21.6495.2777
Fax: +86.21.6426.5271
centralchinasales@fulham.com

Fulham Company Ltd.
(Middle East & Africa)
PowerLED FZCO
(Fulham Authorized Agent)
Business Centre World,
Jafza One, 11th Floor
PO Box 35608, Jebel Ali Free Zone
Dubai, United Arab Emirates
Tel: +971 4 817 0378
Fax: +971 4 817 0201
fulhamdubai@fulham.com

Fulham (India) Pvt. Ltd.
343, Kaliandas Udyog Bhavan
Sadanand Tandel Marg
Near Century Bazar
Prabhadevi, Mumbai 400025
India
Tel: +91.22.66388775-9
gmalkani@fulham.com
sghose@fulham.com

Fulham (India) Pvt. Ltd.
Survey No. 26-3
Village Narhe
Taluka Haveli, Pune 411041
India
Tel: +91.20.24690703/4
Fax: +91.20.24690712
gmalkani@fulham.com
sghose@fulham.com